



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,418	11/07/2005	Ola Olsvik	050447PCTUS	3621
26285 7590 10/19/2007 KIRKPATRICK & LOCKHART PRESTON GATES ELLIS LLP 535 SMITHFIELD STREET PITTSBURGH, PA 15222			EXAMINER SUCHFIELD, GEORGE A	
			ART UNIT 3676	PAPER NUMBER
			MAIL DATE 10/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/538,418

**Applicant(s)**

OLSVIK ET AL.

**Examiner**

George Suchfield

**Art Unit**

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/23/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 3676

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 19 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear how "a tail gas treatment unit" as recited in claim 19 relates to the plant of the parent claim 16. What is the function of such tail gas treatment unit in the overall plant of claim 16. By contrast, note that claim 14 clearly specifies how the tail gas treatment is associated with the plant.

Claim 24 recites the limitation "the tail gas treatment unit" in line 2. There is insufficient antecedent basis for this limitation in the claim. In addition, it is not clear what is meant by the recitation in claim 24 of "a Fischer-Tropsch loop" in the absence of any further recitation.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. 5. Claims 9, 11, 13, 16, 20 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by PARSLEY (US 2004/0244973 A1).

Art Unit: 3676

With respect to independent claim 9, the reference discloses a method for increasing oil recovery from an oil reservoir in which method gas is injected into the reservoir, comprising the steps of separation of air into an oxygen-rich fraction and a nitrogen rich fraction, providing a natural gas stream and leading the natural gas stream and at least a part of the oxygen rich fraction to a reformer for conversion to synthesis gas mainly comprising H<sub>2</sub>, CO, CO<sub>2</sub> and lower amounts of non-converted methane, water vapor, and nitrogen; formation of higher hydrocarbons and/or oxygenated hydrocarbons such as methanol from the synthesis gas in a synthesis unit; withdrawing raw synthesis products and a waste gas from the synthesis unit; and injecting the nitrogen-rich fraction and at least a part of the waste gas into the oil reservoir to increase the oil recovery from the reservoir (paragraphs [0016], [0025], [0037], [0042]). With respect to claim 11, the reference discloses that steam or water generated during at least one of the syngas production and synthesis is injected into the reservoir (paragraph 0043).

With respect to independent claims 13 and 20, the reference discloses a plant for providing gas for downhole injection for pressure support in an oil reservoir for recovering of hydrocarbons and production of oxygenated hydrocarbons or higher hydrocarbons from natural gas, comprising: an air separation unit for production of an oxygen-rich fraction for supply to processes that require oxygen, and a nitrogen-rich fraction for injection; a reformer for conversion of a mixture of natural gas, water and oxygen or oxygen enriched air from the air separation unit into a synthesis gas comprising mainly H<sub>2</sub>, CO, O<sub>2</sub> and small amounts of methane in addition to any inert gas, such as nitrogen; a synthesis unit for conversion of the synthesis gas for synthesis of higher hydrocarbons; an injection plant or means for injecting gas into the reservoir; means for transferring nitrogen from the air separation unit to the means for

Art Unit: 3676

injecting gas; and means for transferring at least a part of a waste gas from the synthesis unit to the means for injecting gas (paragraphs [0016], [0025], [0037]). With respect to claims 16 and 23, the reference discloses that the synthesis unit comprises one or more once-through Fischer-Tropsch units for synthesis of higher hydrocarbons (paragraph [0037]).

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 9, 10 and 13-24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 17, 19-21 and 23 of copending Application No. 10/538,417. Although the conflicting claims are not identical, they are not patentably distinct from each other because the plant of the ‘417 copending claim 17 could obviously be used in a method for increasing oil recovery from an oil reservoir, as called for in pending claim 9, since the ‘417 claim 17 plant comprises “means for injecting gas into the reservoir”. With respect to pending claim 10, the tail gas treatment unit of the ‘417 claim 17 plant is deemed to comprise a carbon dioxide recovery unit.

Otherwise, the remaining pending claims 13-24 appear to correspond to the claims 17, 19-21 and 23 of the currently pending in the '417 application. In this regard, it is noted that pending claim 13 includes the embodiment of the '417 claim 17 synthesis unit for the synthesis of higher hydrocarbons. It is deemed that the "injection plant positioned to inject gas into the reservoir" of the pending claim 20 will obviously comprise or include a means for injecting gas into the reservoir.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 11 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 17 of copending Application No. 10/538,417 in view of Parsley et al (2004/0244973). As noted above, Parley et al (note Para [0042]) discloses that steam or water generated during at least one of the syngas production and synthesis is injected into the reservoir.

Accordingly, it would have been obvious to one of ordinary skill in the art to which the invention pertains, to similarly utilize any steam and/or water generated during the operation of the synthesis unit of the '417 claim 17 plant for injection into the subterranean reservoir, as taught by Parsley et al, in order to augment the displacement and recovery of oil or hydrocarbons from the subterranean oil reservoir.

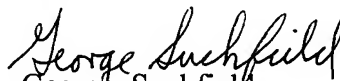
This is a provisional obviousness-type double patenting rejection.

Art Unit: 3676

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Suchfield whose telephone number is 571-272-7036. The examiner can normally be reached on M-F (6:00 - 2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
George Suchfield  
Primary Examiner  
Art Unit 3676

Gs  
October 17, 2007